

AD-A071 714

ARMY FIELD ARTILLERY SCHOOL FORT SILL OKLA
LASERS, A BIBLIOGRAPHY.(U)
SEP 79 L L MILLER

F/G 20/5

UNCLASSIFIED

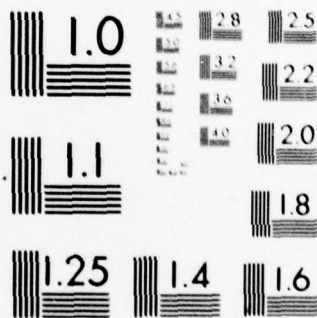
SB-64

NL

| OF |
AD
A071714



END
DATE
FILMED
8-79
DDC



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

DA 071214

LEVEL

12

U.S. ARMY FIELD ARTILLERY SCHOOL

LIBRARY

FORT SILL, OKLAHOMA

SPECIAL BIBLIOGRAPHY NUMBER 64

LASERS, A BIBLIOGRAPHY

BY

LESTER L. MILLER, JR.

2 SEPTEMBER 1979

DDC
RECEIVED
JUL 26 1979
C

DDC FILE COPY

This document has been approved
for public release and sale; its
distribution is unlimited.

Morris Swett Library
USAFAS, DCRDT, 2 Sep 79
SB 64

79 07 .24 034

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 14 SB-64-7	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Lasers, a bibliography		5. TYPE OF REPORT & PERIOD COVERED 9 Final Rept.
6. AUTHOR(s) 10 Lester L. Miller, Jr.		6. PERFORMING ORG. REPORT NUMBER
7. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Field Artillery School Morris Swett Library Fort Sill, Ok 73503		8. CONTRACT OR GRANT NUMBER(s)
8. CONTROLLING OFFICE NAME AND ADDRESS 12 18 P.		9. REPORT DATE 11 2 Sep 79
9. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
		11. NUMBER OF PAGES 9
		12. SECURITY CLASS. (of this report) Unclassified
		13. DECLASSIFICATION/DOWNGRADING SCHEDULE
14. DISTRIBUTION STATEMENT (of this Report) This report is approved for public release; distribution unlimited		
15. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
16. SUPPLEMENTARY NOTES		
17. KEY WORDS (Continue on reverse side if necessary and identify by block number) Bibliographies; books, armor, artillery, combat vehicles, lasers, periodicals, technology, warfare		
18. ABSTRACT (Continue on reverse side if necessary and identify by block number) The subject of laser technology as applied to theory and military practice is covered in this bibliography. Materials have been selected from the unclassified holdings of the Morris Swett library. Book and periodical articles are covered.		

FOREWORD

This bibliography presents books and periodical articles on the subject of lasers. This unclassified number is intended as a comprehensive introduction to the subject.

The laser, discovered in 1960, is the acronym for light amplification by stimulated emission of radiation. It produces a concentrated beam of light on a target. The optical maser is a related microwave application of the laser.

This number uses an arbitrarily devised acronym for periodical articles. Inclusion of an item, or omission, does not imply USAFAS indorsement or sanction of the compiler's point-of-view nor does it guarantee accuracy of content. Comment and criticism concerning this list is solicited.

LESTER L. MILLER, JR.
Supervisory Librarian

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or special
A	

TABLE OF CONTENTS

PAGINATION

Part I

Books 1 - 3

Part II

A. Periodicals Consulted 4

B. Periodical Articles 5 - 6

PART I

BOOKS

- TK7871.3
S4B4 Beck, R. Table of Laser Lines in Gases and Vapors, Berlin, Germany: Springer-Verlag, c1976.
- TK7871.3
B4 Beesley, M.J. Lasers and Their Applications, New York, NY: Halsted Pr., Inc., c1976.
- TK7871.3
B5 Bloom, Arnold L. Gas Lasers, New York, NY: J. Wiley, c1968.
- TK7872
M45B7 Brotherton, Manfred. Masers and Lasers, How They Work, What They Do, New York, NY: McGraw-Hill, c1964.
- TK7871.3
B6 Brown, Ronald. Lasers, Tools of Modern Technology, Garden City, NY: Doubleday, c1968.
- TK7872
L3S2
67-563 Burnett, W.D. Laser Eye Hazard Evaluations, Albuquerque, NM: Sandia Labs, 1967.
- TK7871.3
B8 Burroughs, William. Lasers, New York, NY: Crane, Russak & Co., c1976.
- TK7871.37
C3 Campbell, Ralph W., et al. Semiconductor Diode Lasers, Indianapolis, IN: H.W. Sams, c1972.
- TK7872
L3C3 Carroll, John Millar. The Story of the Laser, New York, NY: Dutton, c1964, 1970.
- TK7871.3
C2 CRC Handbook of Lasers, with Selected Data on Optical Technology, Cleveland, OH: Chemical Rubber Co., c1971.
- TK7871.3
S4D4 Demtröder, W. Laser Spectroscopy, 2nd enl ed, Berlin, Germany: Springer-Verlag, c1973.
- *TK7871.3
F4
Vert File Ferranti, Ltd. Lasers, Transceivers in Armoured Fighting Vehicles, Eninburgh, Scotland: the co., 1974.
- QE538.8
F6
SP5042 Fowler, Robert A. Earthquake Prediction from Laser Surveying; a Report, Washington, DC: NASA, 1968.
- TK7835
F9 Frungel, Frank B. High Speed Pulse Technology, New York, NY: Academic Pr., c1965.

TK7871.3 H36	Gross, R.W.F., <u>et al</u> , eds. <u>Handbook of Chemical Lasers</u> , New York, NY: Wiley, c1976.
TK7872 L3H2	Hawkins, Ralph W. <u>Handbook, Rapid Firing Medical Laser Unit</u> , Redstone Arsenal, AL: USA Msl Cmd, 1967.
TK7872 L3H4	Heavens, O.S. <u>Optical Masers</u> , New York, NY: Wiley, c1964.
UL167.5 C2 TN1683/65	Higgins, J. <u>Laboratory Studies of Q-Spoiled Lasers</u> , Val-carter, Que: Canada Defense Reserach Bd., 1965.
TK7871.3 K36	Kaminow, Ivan P. <u>Laser Devices and Applications</u> , New York, NY: IEEE Pr., c1973.
QC449 K6	Kock, Winston E. <u>Lasers and Holography; an Introduction to Coherent Optics</u> , Garden City, NY: Doubleday, c1969.
AS36 R3 R921/1	Ksander, Yuri. <u>Soviet Chemical Laser Research</u> , Santa Monica, CA: Rand Corp., 1971.
AS36 R3 R921	----- <u>Soviet Chemical Laser Research: Pulsed Lasers</u> , Santa Monica, CA; Rand Corp., 1971.
TK7872 L3L2	<u>Lasers</u> . New York, NY: M. Dekker, c1966+.
TK7872 L3L3	Leinwoll, Stanley. <u>Understanding Lasers and Masers</u> , New York, NY: Rider, c1965.
TK7871.3 L4	Lengyel, Bela A. <u>Lasers</u> , New York, NY: Wiley-Interscience, c1971.
TK7871.3 L9	Lytel, Allan H., <u>et al</u> . <u>ABC's of Lasers & Masers</u> , 3rd ed., Indianapolis, IN: H.W. Sams, c1972.
TK7871.3 M2	Marshall, Samuel L. <u>Laser Technology and Applications</u> , New York, NY: McGraw-Hill, c1968.
TK7872 M45M5	Melia, T.P. <u>An Introduction to Massers and Lassers</u> , London, England: Chapman & Hall, c1967.
TA1675 M86	Muncheryan, Hrand M. <u>Laser Fundamentals and Applications</u> , Indianapolis, IN: H.W. Sams, c1975.

TK7871.3
P5 Pike, Charles A. Lasers and Masers, Indianapolis, IN: H.W. Sames, c1967.

AS36
R3 Rosen, J.H., et al. The Effectiveness of a New Air Defense Weapon in Cloudy Weather: Methodology and Applications, Santa Monica, CA: Rand Corp., 1973.

TK5103
R6 Ross, Monte. Laser Receivers; Devices, Techniques, Systems, New York, NY: Wiley, c1966.

TK7871.3
S5 Siegman, A.E. An Introduction to Lasers and Masers, New York, NY: McGraw-Hill, c1971.

TK7871.3
A4 Skobel'tsyn, D.V., ed. Physical Processes in Lasers, trans. by James S. Wood, vol. 56, New York, NY: Consultants Bureau, c1973.

TK7872
L3S8 Stehling, Kurt R. Lasers and Their Applications, Cleveland, OH: World Pub Co, c1977.

UF555
L2U6 U.S. Army Artillery Board. Final Report of Service Test of Laser Range-Finder XE-6, Fort Sill, OK: the bd, 1964.

FA 363

U104
U51 U.S. Army Concept Team in Vietnam. Evaluation of the Laser Target Designator System (LTDS), APO San Francisco, CA: the cmd, 1970.

TK7871.3
U5 Van Pelt, W.F., et al. Laser Fundamentals and Experiments. Washington, DC: U.S. Bur of Radiological Health, 1970.

70-1

TK7871.3
D6W3 Watrasiewicz, B.M. Laser Doppler Measurements, Boston, MA: Buttersorths, c1976.

PART II, A

PERIODICALS CONSULTED
(Arrangement is by acronym)

<u>LC #</u>	<u>ACRONYM</u>	<u>PERIODICAL</u>
U1 W4	<u>A&W</u>	<u>Armies & Weapons</u>
UZ410 A8	<u>AID</u>	<u>Army Information Digest</u>
UF23.5 F6T2	<u>FA</u>	<u>Field Artilleryman (Artillery Trends)</u>
UF1 F6	<u>FAJ</u>	<u>Field Artillery Journal</u>
TL500 I 6	<u>IDR</u>	<u>International Defense Review</u>
TL500 I 5	<u>INT</u>	<u>Interavia</u>
UG1 P8	<u>MIL ENG</u>	<u>Military Engineer</u>
UF1 A8	<u>ORD</u>	<u>Ordnance</u>
UJ1 S61	<u>SIG</u>	<u>Signal</u>
U1 S7	<u>SMR</u>	<u>Soviet Military Review</u>
U162 S7	<u>ST RVW</u>	<u>Strategic Review</u>
UA19 R9	<u>TA</u>	<u>Technology & Armament</u>

PART II, B

PERIODICAL ARTICLES

Beave, W.J. "The High-Energy Laser: Strategic Policy Implifications," ST RVW, 5:100-107, Winter 77.

"Copperhead Survives Lightning Test," FAJ, 46:50, Jul-Aug 78.

"Copperhead Venom Strikes Deadly Blow during SECDEF Shoot," FAJ, 47:57, Mar-Apr 79.

Crowther, James I. "Laser Applications of the Future," MIL ENG, 69:92-95, Mar-Apr 77.

DeArcangelis, M. "The Laser," A&W, I:4:11-14, Mar-Apr 77; II:11-14, Apr-May 77.

DeVore, Charles. "A Coherent Look at Lasers," SIG, 17:67,68, May 63.

"G/VLLD," FAJ, 46:16,17, Jan-Feb 78.

"Hand-Held Laser Ranging System," IDR, 8:582, Aug 75.

"Hellfire," FAJ, 43:22, Nov-Dec 75.

Jung, H.J. "The Talissi Weapon Fire Simulator," IDR, 10:1135-1138, Dec 77.

Kosyrev, Y. "The Laser: Today and Tomorrow," SMR, 5:26-28, May 71.

"Laser Adapted for Ignition of Explosives," FA, 46:10, Sep 70.

"Laser for Tankers," FA, 43:28, Apr 69.

"Laser: Light Amplification from the Ruby Crystal," INT, 17:997,998, Aug 62.

"Laser Voice and Data Communicator," IDR, 7:794, Dec 74.

"Laser-Guided Anti-Tank Weapon System," IDR, 8:82, Feb 75.

"Lasers Work," FAJ, 45:71, Jul-Aug 77; 46:55, Sep-Oct 78.

Lazenby, S.D. "Ferranti Laser Aids to Close Air Support," IDR, 7:210,211, Apr 74.

Merrill, Harrison J. "Army Applications of Lasers," SIG, 19:57-60, Oct 64.

"New Generation Fire Control System for Submarines," IDR, 8:79,80, Feb 75.

"New Laser Discoveries," ORD, 47:88, Jul-Aug 62.

Nikolayev, A. "About Lasers and Their Development," TA, 5:138-140, May 77.

Reed, Jean. "The Laser Rangefinder," FAJ, 43:31-35, Sep-Oct 75.

Russell, Michael N. "The Laser," INT, 19:560-564, Apr 64; 19:701-705, May 64.

Soltes, Aaron S. "Military Potential of Lasers," MIL ENG, 54:416-419, Nov-Dec 62.

Summers, J.T. "Linac - Advanced Attack Avionics at Low Cost," IDR, 10:347-349, Apr 77.

"Three New Periscopic Laser Rangefinder Systems for Tanks," IDR, 8:583,584, Aug 75.

Toft, E. "A New Generation Laser Rangefinder," IDR, 8:702, Oct 75.

"The U.S. Navy's MK86 Fire Control System" IDR, 8:59,60, Feb 75.

Verble, K.E., et al. "Precision Laser Target Designation - a Breakthrough in Guided Weapons Employment," IDR, 7:204-209, Apr 74.

Vetrov, V., et al. "Lasers in Reconnaissance and Gunfire Control," SMR, 1:25-27, Jan 76.

Watson, Robert. "Laser - a Bright Light for the Army," AID, 18:32-39, Apr 63.

"XM1 Tank to Have New Laser and Infrared Systems," FAJ, 45:20, May-Jun 77.